

# EXHIBIT 1

LEXSEE 2005 U.S. DIST. LEXIS 10749

**CORDIS CORPORATION, Plaintiff, v. BOSTON SCIENTIFIC CORPORATION  
and SCIMED LIFE SYSTEMS, INC., Defendants.**

**Civ. No. 03-027-SLR**

**UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE**

*2005 U.S. Dist. LEXIS 10749*

**June 3, 2005, Decided**

**SUBSEQUENT HISTORY:** Patent interpreted by *Cordis Corp. v. Boston Sci. Corp.*, 2005 U.S. Dist. LEXIS 10750 (D. Del., June 3, 2005)

**PRIOR HISTORY:** *Cordis Corp. v. Boston Sci. Corp.*, 99 Fed. Appx. 928, 2004 U.S. App. LEXIS 11557 (2004)

**COUNSEL:** [\*1] For Steven J. Balick, Esq. and John G. Day, Esq. of Ashby & Geddes, Wilmington, Delaware. Of Counsel: Gregory L. Diskant, Esq., William F. Cavanaugh, Esq., Kim J. Landsman, Esq., Rosa E. Son, Esq. and Catherine A. Williams, Esq. of Patterson, Belknap, Webb & Tyler, LLP, New York, New York.

For Josy W. Ingersoll, Esq. and John W. Shaw, Esq. of Young Conaway Stargatt & Taylor, LLP, Wilmington, Delaware. Of Counsel: John Desmarais, Esq. and Peter Armenio, Esq. of Kirkland & Ellis, New York, New York.

**JUDGES:** ROBINSON, Chief Judge.

**OPINION BY:** Sue L. Robinson

**OPINION:**

**MEMORANDUM OPINION**

Dated: June 3, 2005  
Wilmington, Delaware

**ROBINSON, Chief Judge**

**I. INTRODUCTION**

On January 13, 2003, plaintiff Cordis Corporation ("Cordis") filed this patent infringement action against defendants Boston Scientific Corporation and Scimed Life Systems, Incorporated (collectively "BSC") alleging infringement of *U.S. Patent No. 4,739,762* ("the '762 patent") by BSC's EXPRESS and TAXUS EXPRESS stents. (D.I. 1) On March 5, 2003, BSC answered and counterclaimed against Cordis, asserting, among other things, that Cordis was not entitled to damages based on its claims. (D.I. 26) On August 2, 2004, Cordis [\*2] filed an amended complaint alleging BSC's LIBERTE stent infringed the '762 patent and *U.S. Patent No. 5,895,406* ("the '406 patent"). (D.I. 161) On August 18, 2004, BSC answered the amended complaint and again counterclaimed that Cordis was not entitled to damages. (D.I. 163)

This court has jurisdiction over this matter pursuant to 28 U.S.C. § 1331. Pending before the court is BSC's motion for summary judgment that Cordis is not entitled to lost profits damages based upon the alleged infringement of the '762 patent by a drug-eluting stent. (D.I. 221)

**II. BACKGROUND**

In 1998, Cordis sued BSC alleging infringement of the '762 patent by BSC'S NIR stent. See *Cordis Corp. v. Boston Scientific Corp.*, 1998 U.S. Dist. LEXIS 11342, 97-550-SLR (D. Del.). A trial was held in 2000; upon appeal, the Federal Circuit affirmed in part, reversed in part and remanded the case and a subsequent trial was held in March 2005. *Id.*; *Cordis Corp. v. Medtronic AVE, Inc.*, 339 F.3d 1352 (Fed. Cir. 2003).

Cordis now alleges BSC's TAXUS, EXPRESS and

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LIBERTE stents infringe the '762 *patent*. n1 Cordis claims it is entitled to lost profits associated with the sales of its CYPHER drug-eluting [\*3] stent. According to Cordis, it has lost valuable market share to the allegedly infringing TAXUS drug-eluting stent. Cordis alleges its lost profits as of November 2004 were \$ 844 million. (D.I. 257 at 2)

n1 It is undisputed that Cordis currently licenses the '762 *patent* to competitors.

### III. STANDARD OF REVIEW

A court shall grant summary judgment only if "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." *Fed. R. Civ. P. 56(c)*. The moving party bears the burden of proving that no genuine issue of material fact exists. See *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586 n.10, 89 L. Ed. 2d 538, 106 S. Ct. 1348 (1986). "Facts that could alter the outcome are 'material,' and disputes are 'genuine' if evidence exists from which a rational person could conclude that the [\*4] position of the person with the burden of proof on the disputed issue is correct." *Horowitz v. Fed. Kemper Life Assurance Co.*, 57 F.3d 300, 302 n.1 (3d Cir. 1995) (internal citations omitted). If the moving party has demonstrated an absence of material fact, the nonmoving party then "must come forward with 'specific facts showing that there is a genuine issue for trial.'" *Matsushita*, 475 U.S. at 587 (quoting *Fed. R. Civ. P. 56(e)*). The court will "view the underlying facts and all reasonable inferences therefrom in the light most favorable to the party opposing the motion." *Pa. Coal Ass'n v. Babbitt*, 63 F.3d 231, 236 (3d Cir. 1995). The mere existence of some evidence in support of the nonmoving party, however, will not be sufficient for denial of a motion for summary judgment; there must be enough evidence to enable a jury reasonably to find for the nonmoving party on that issue. See *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 249, 91 L. Ed. 2d 202, 106 S. Ct. 2505 (1986). If the nonmoving party fails to make a sufficient showing on an essential element of its case with respect to which it has

the burden of [\*5] proof, the moving party is entitled to judgment as a matter of law. See *Celotex Corp. v. Catrett*, 477 U.S. 317, 322, 91 L. Ed. 2d 265, 106 S. Ct. 2548 (1986).

### IV. DISCUSSION

To recover lost profits damages, a patentee must show a reasonable probability that, "but for" the infringement, it would have made the sales that were made by the infringer. *Rite-Hite Corp. v. Kelley Co., Inc.*, 56 F.3d 1538, 1545 (*Fed. Cir. 1995*) (citations omitted). The Federal Circuit has not adopted any one method for proving "but for" causation; a patentee may use "any method of showing, with reasonable probability, an entitlement to lost profits "but for" the infringement." *Micro Chem., Inc. v. Lextron, Inc.*, 318 F.3d 1119, 1121 (*Fed. Cir. 1995*) (citations omitted). Most commonly, patentees use the Panduit test to show causation. *Id.*

Under the Panduit test, the patentee must prove: (1) demand for the patented product; n2 (2) absence of acceptable non-infringing substitutes; (3) manufacturing and marketing capability to exploit the demand; and (4) the amount of the profit it would have made. n3 *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152 (6th Cir. 1978). [\*6]

n2 Assuming that the accused drug-eluting stent infringes the '762 *patent*, then there is evidence of a demand for the patented product, as both companies sell drug-eluting stents. See *Smithkline Diagnostics, Inc. v. Helena Lab. Corp.*, 926 F.2d 1161, 1165 n.3 (*Fed. Cir. 1991*) (stating that sales of an infringing product is sufficient evidence of demand for the patented product).

n3 The parties do not dispute at bar whether or not Cordis could prove the amount of profit it would have made, so this factor is not addressed in this memorandum opinion.

A patentee need not negate every possibility that a purchaser might have bought a product other than its own. *Rite-Hite*, 56 F.3d at 1545. To the contrary, so long as the patentee establishes each of the Panduit factors, the

court may reasonably infer that the claimed lost profits were caused by the infringing sales. *Id.* Thus, by satisfying the Panduit test, the patentee establishes its prima facie case with respect to [\*7] "but for" causation. The burden, in turn, shifts to the alleged infringer to show that the inference is unreasonable for some or all of the lost sales.

For the purposes of this summary judgment motion, the court assumes that the accused drug-eluting stent infringes the '762 patent and, as such, a drug-eluting stent is an appropriate patented product under the '762 patent. Based on this assumption and the evidence of record, the court concludes there is not an acceptable noninfringing alternative to the patented product. In order to be an acceptable noninfringing alternative, a product must have all the advantages of the patented product. See *Standard Havens Prods., Inc. v. Gencor Indust., Inc.*, 953 F.2d 1360, 1373 (Fed. Cir. 1991) ("A product . . . which lacks the advantages of the patented product can hardly be termed a substitute acceptable to the customer who wants those advantages." ); *Smithkline Diagnostics, Inc. v. Helena Lab. Corp.*, 926 F.2d 1161, 1166 (Fed. Cir. 1991) ("products without such features would obviously not be acceptable noninfringing substitutes"). Therefore, an acceptable noninfringing alternative must be another drug-eluting [\*8] stent. The parties do not dispute that there are no other drug-eluting stents on the market, as the only drug eluting stents are the CYHPER and TAXUS stents.

BSC argues that one of the '762 licensees could make a noninfringing drug-eluting stent and, therefore, there is the possibility of a noninfringing alternative. "To be an acceptable non-infringing substitute, [however,] the product or process must have been available or on the market at the time of infringement." *Grain Processing Corp. v. Am. Maize-Products Co.*, 185 F.3d 1341, 1349 (Fed. Cir. 1999) (emphasis in original) (citation omitted). The ability to make a noninfringing alternative alone is

not enough to render such a substitute "available" for lost profits purposes. See *Micro Chem, Inc. v. Lextron, Inc.*, 318 F.3d 1119, 1123 (Fed. Cir. 2003) (citing *Grain Processing Corp.*, 185 F.3d at 1346). Therefore, the fact that a licensee could make a drug-eluting stent does not mean that there are noninfringing alternatives available on the market. Assuming, then, that the TAXUS stent infringes the '762 patent, there are no noninfringing alternatives.

With respect to Cordis' [\*9] ability to meet market demands, BSC argues that Cordis cannot meet half of the market demand, much less all of the demand. Cordis has put forth evidence that its suppliers could increase their production of stents and it could increase its coating of stents to meet market demand. (D.I. 257, Ex. 3 at 61, 71-73, 91-93, 111) Therefore, Cordis' ability to meet demand is still a disputed fact.

Because Cordis has shown that there are disputed material issues of fact with respect to the Panduit factors, BSC's motion for summary judgment is denied.

## V. CONCLUSION

For the reasons stated, BSC's motion for summary judgment of no lost profits (D.I. 221) is denied. An order consistent with this memorandum opinion shall issue.

## ORDER

At Wilmington this 3d day of June, 2005, consistent with the memorandum opinion issued this same day;

IT IS ORDERED, that BSC's motion for summary judgment of no lost profits based on the Palmaz '762 patent (D.I. 221) is denied.

Sue L. Robinson

United States District Judge

# EXHIBIT 2

LEXSEE 2003 U.S. DIST LEXIS 14130

**POLY-AMERICA, L.P., Plaintiff-counterdefendant, VS. GSE LINING  
TECHNOLOGY, INC., Defendant-counterplaintiff.**

**Civil Action No. 3:00-CV-1457-D**

**UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF  
TEXAS, DALLAS DIVISION**

*2003 U.S. Dist. LEXIS 14130*

**August 13, 2003, Decided  
August 13, 2003, Filed**

**SUBSEQUENT HISTORY:** Affirmed in part and reversed in part by, Remanded by *Poly-America, L.P. v. GSE Lining Tech., Inc.*, 2004 U.S. App. LEXIS 19234 (Fed. Cir., Sept. 14, 2004)

**PRIOR HISTORY:** *Poly-America, Inc. v. GSE Lining Tech., Inc.*, 2002 U.S. Dist. LEXIS 24385 (N.D. Tex., Dec. 19, 2002)

**DISPOSITION:** [\*1] GSE motion for judgment as a matter of law or for a new trial, and PALP motion for increased damages, prejudgment interest at a specific rate, and attorney's fees granted in part and denied in part.

**COUNSEL:** For Poly-America LP, Plaintiff: Jerry R Selinger, LEAD ATTORNEY, John C Eichman, Timothy G Ackermann, Jenkins & Gilchrist, Dallas, TX.

For GSE Lining Technology Inc, Defendant: Joe Bill Harrison, LEAD ATTORNEY, Gardere Wynne Sewell, Dallas, TX.

For GSE Lining Technology Inc, Defendant: Alison J Baldwin, David M Frischkorn, Nicole A Fiorella, S Richard Carden, McDonnell Boehnen Hulbert & Berghoff, Chicago, IL.

For GSE Lining Technology Inc, Defendant: T Michael Wall, Gardere Wynne Sewell, Houston, TX.

For GSE Lining Technology Inc, Counter Claimant: Joe Bill Harrison, LEAD ATTORNEY, Gardere Wynne Sewell, Dallas, TX.

For GSE Lining Technology Inc, Counter Claimant: Nicole A Fiorella, McDonnell Boehnen Hulbert & Berghoff, Chicago, IL.

**JUDGES:** SIDNEY A. FITZWATER, UNITED STATES DISTRICT JUDGE.

**OPINION BY:** SIDNEY A. FITZWATER

**OPINION:**

**MEMORANDUM OPINION AND ORDER**

In this patent infringement action, the jury returned a verdict in favor of plaintiff-counterdefendant Poly-America, [\*2] L.P. ("PALP") and against defendant-counterplaintiff GSE Lining Technology, Inc. ("GSE"). n1 GSE moves for judgment as a matter of law or for a new trial, and PALP moves for increased damages, n2 prejudgment interest at a specific rate, and attorney's fees. For the reasons that follow, the court grants in part and denies in part the parties' respective motions. It holds that if PALP accepts a remittitur of \$ 266,502.00 of the jury's reasonable royalty award, it is entitled to judgment in the amount of \$ 7,150,000 for lost profits and \$ 4,815,157.70 for a reasonable royalty, and to prejudgment interest at the Aaa corporate long-term bond rate compounded annually, using the mid-year convention, beginning June 9, 1998. The court denies PALP's request for increased damages and attorney's fees. If PALP does not accept the remittitur, the court will grant a new trial.

n1 On November 8, 2002 the court granted the September 6, 2002 motion of PALP's predecessor--Poly-America, Inc. ("Poly-America")--to substitute and amend its complaint so that PALP would be plaintiff-defendant and defendant-counterplaintiff Serrot International, Inc. ("Serrot") would be replaced by GSE, Serrot's successor-in-interest. Because the parties had been referred to as Poly-America and Serrot during pretrial and other relevant proceedings, the court and the parties used these names at trial rather than the names of the substituted parties. For clarity, the court will refer to the parties in this opinion as PALP and GSE except where the context otherwise requires.

[\*3]

n2 This request is set forth in a brief in support of increased damages, which the court has treated as a motion for increased damages.

I

This patent infringement action relates to *U.S. Patent No. 5,763,047* ("the '047 patent"), entitled "Blown-Film Textured Liner Having a Smooth Welding Strip," and *U.S. Patent No. 5,804,112* ("the '112 patent"), entitled "Method of Co-Extruding a Blown-Film Textured Liner." The '047 patent concerns a type of liner suitable for use in landfills. The '112 patent pertains to a process that can be used to make the product that is the subject of the '047 patent. Both patents originate from an application filed on April 3, 1996, and each is entitled to the filing date for purposes of evaluating the prior art.

PALP sued GSE for infringement arising from the conduct of Serrot International, Inc. ("Serrot"). See *supra* note 1. During the course of the litigation GSE ultimately admitted infringement, but it defended the suit and prosecuted counterclaims based on allegations of patent invalidity. The jury found that Serrot had willfully infringed the relevant claims [\*4] of the '047 and '112 patents. It rejected, *inter alia*, Serrot's reliance on the defenses of the on sale bar, prior public knowledge, prior

invention, and obviousness. It found that PALP was entitled to lost profits of \$ 7,150,000 and a reasonable royalty of \$ 5,081,659.70. Following the verdict, the court found in a memorandum opinion that the case was exceptional given the jury's willfulness finding. The court filed a judgment in PALP's favor for \$ 12,231,659.70, together with its reasonable attorney's fees in an amount to be determined separately on timely application, prejudgment interest on the sum of \$ 12,231,659.70 at the rate provided by law, commencing from the time that the royalty payments and lost profits would have been received, post-judgment interest, and taxable costs of court.

Thereafter, the parties filed the following motions and request that the court decides today: (1) GSE's January 9, 2003 motion to strike the second and fourth defenses in PALP's reply to counterclaims, n3 (2) GSE's January 21, 2003 motion for judgment as a matter of law and alternative motion for new trial; (3) GSE's January 21, 2003 motion to alter or amend the judgment; (4) PALP's January 21, 2003 motion [\*5] to amend judgment to set prejudgment interest; (5) PALP's January 21, 2003 brief in support of increased damages; (6) GSE's January 21, 2003 motion for additional and amended findings; n4 (7) PALP's January 21, 2003 application for attorney's fees; (8) GSE's February 10, 2003 objections to PALP's new evidence offered in support of increased damages and prejudgment interest; n5 and (8) PALP's and GSE's May 28, 2003 joint motion regarding arbitrability. The court heard oral argument on May 30, 2003.

n3 GSE moves to strike the second and fourth defenses in PALP's December 6, 2002 reply to GSE's counterclaims. PALP asserted as its second affirmative defense that "GSE is prohibited by claim preclusion and/or issue preclusion from reasserting in these Counterclaims defenses as to which, law of the case, the Court has granted summary judgment in favor of Poly-America." PALP Rep. to GSE Counterclaim at P 12. It contended as its fourth affirmative defense that "GSE has waived any asserted right to arbitration by invoking the judicial process in this case." *Id.* P 14. GSE moves to strike these defenses under *Fed. R. Civ. P. 12(f)*,

contending that PALP could rely on them to preclude GSE from arbitrating disputes over a license to the '047 and '112 patents between GSE and PALP. The court denies the motion. These defenses were not included in the pretrial order that governed the trial of this case and were not litigated during trial. It is well settled that the defenses are therefore waived. *See, e.g., Schadler v. Anthem Life Ins. Co.*, 147 F.3d 388, 392 n.4 (5th Cir. 1998). Accordingly, the defenses need not be stricken, and GSE's motion to strike is denied.

[\*6]

n4 To the extent the court has in this memorandum opinion and order made the additional or amended findings that GSE requests, the motion is granted. Insofar as the motion has been mooted by the court's decision denying attorney's fees, or the court has found it unnecessary to make additional or amended findings, the motion is denied.

n5 GSE's objections addressed to PALP's evidence concerning increased damages are overruled as moot in view of the court's decision declining to award such damages. Its objection to the court's consideration of evidence regarding prejudgment are overruled on the merits to the extent the court has relied on evidence to which GSE has objected.

## II

The court turns first to GSE's motion for judgment as a matter of law and alternative motion for new trial.

The court may grant judgment as a matter of law after the jury returns a verdict. *See Fed. R. Civ. P. 50(b)*. "When a party moves for [judgment as a matter of law, the trial court must consider all the evidence in a light most favorable to the non-mover, must draw reasonable inferences favorable to the non-mover, [\*7] must not determine credibility of witnesses, and must not substitute its choice for that of the jury between

conflicting elements in the evidence." *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 893 (Fed. Cir. 1984); *Mota v. Univ. of Tex. Houston Health Sci. Ctr.*, 261 F.3d 512, 519 (5th Cir. 2001). n6 "The court should give credence to the evidence favoring the nonmovant as well as that evidence supporting the moving party that is uncontradicted and unimpeached, at least to the extent that that evidence comes from disinterested witnesses." *Mota*, 261 F.3d at 519 (internal quotation marks omitted). The court can grant judgment as a matter of law "only if the jury's factual findings are not supported by substantial evidence or if the legal conclusions implied from the jury's verdict cannot in law be supported by those findings." *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998). "Substantial' evidence is such relevant evidence from the record taken as a whole as might be accepted by a reasonable mind as adequate to support the finding under review." *Perkin-Elmer*, 732 F.2d at 893. [\*8] "If no reasonable person could have reached a verdict for [PALP] in light of the record before the jury, [GSE] will prevail [on the motion]." *Tec Air, Inc. v. Denso Mfg. Mich. Inc.*, 192 F.3d 1353, 1357 (Fed. Cir. 1999). n7

n6 This court can rely on Fifth Circuit decisions on procedural issues that do not directly relate to substantive patent law. Under the Federal Circuit's courtesy rule, it is "generally guided by the law of the regional 'circuit to which district court appeals normally lie, unless the issue pertains to or is unique to patent law[.]" *Amana Refrigeration, Inc. v. Quadlux, Inc.*, 172 F.3d 852, 856 (Fed. Cir. 1999) (quoting *Molins PLC v. Quigg*, 837 F.2d 1064, 1066 (Fed. Cir.1988)).

n7 PALP maintains that judgment as a matter of law cannot be granted on a ground that the moving party did not present at the close of the evidence. *See, e.g., Allied Bank-West, N.A. v. Stein*, 996 F.2d 111, 114-15 (5th Cir. 1993). Because the court is denying relief on all the grounds that GSE presents, it need not decide whether a particular basis for judgment as a matter of law was properly preserved.

[\*9]

New trials can be granted under *Rule 59* "for any of the reasons for which new trials have heretofore been granted in actions at law in the courts of the United States." *Rule 59(a)*. The rule "confirms the trial court's historic power to grant a new trial based on its appraisal of the fairness of the trial and the reliability of the jury's verdict." *Smith v. Transworld Drilling Co.*, 773 F.2d 610, 612-13 (5th Cir. 1985). "A new trial may be granted, for example, if the district court finds the verdict is against the [great] weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course." *Id.* at 613 (footnotes omitted).

GSE maintains that the verdict is in several respects against the great weight of the evidence, the damages are excessive, and thus against the great weight of the evidence, and the court committed trial errors that were unfairly prejudicial.

In determining whether a new trial is appropriate because the verdict is against the great weight of the evidence, the court's review of the evidence is less deferential than in evaluating a motion for judgment as a matter of law. [\*10] The standard for whether to grant a new trial is whether the verdict

is against the great weight of the evidence. On the other hand, the standard for granting judgment as a matter of law is whether there is a legally sufficient evidentiary basis for the jury's verdict. A verdict can be against the "great weight of the evidence," and thus justify a new trial, even if there is substantial evidence to support it.

*Whitehead v. Food Max, Inc.*, 163 F.3d 265, 269 n.2 (5th Cir. 1998) (citations, brackets, and internal quotation marks omitted). In evaluating a motion for a new trial, the court need not take the evidence in the light most favorable to the nonmoving party. Whether to grant a motion for a new trial is not a pure question of law, and the court is permitted to weigh the evidence to determine whether the jury has made a mistake in returning a verdict that is against the great weight of the evidence:

Additionally, the trial court in passing on a motion for a new trial need not take the view of the evidence most favorable to the verdict winner, as is required in passing on motions for judgment as a matter of law, but may weigh the evidence. [\*11] Thus, while the district judge in ruling on a motion for judgment as a matter of law decides a pure, nondiscretionary question of law, that judge in ruling on a new trial motion may and should exercise a sound discretion.

*Id.* (brackets, internal quotation marks, and citations omitted) (citing and quoting *Shows v. Jamison Bedding, Inc.*, 671 F.2d 927, 930 (5th Cir. 1982)). The court cannot, however, simply substitute its own judgment for that of the jury, and it should not set aside a verdict simply because the evidence is in conflict or there is evidence that contradicts the verdict. See 11 Charles Alan Wright & Arthur R. Miller, *Federal Practice and Procedure* § 2806, at 66-67 (2d ed. 1995).

### III

GSE presented six patent invalidity defenses at trial, each of which the jury rejected. It moves for judgment as a matter of law or a new trial as to four of these defenses: the on-sale bar, prior public knowledge, prior invention, and obviousness. GSE argues that the verdict is not supported by substantial evidence or is against the great weight of the evidence.

The presumption of patent validity can be overcome only if the party seeking to invalidate [\*12] the patent meets its burden by clear and convincing evidence. *Rosco, Inc. v. Mirror Lite Co.*, 304 F.3d 1373, 1377-78 (Fed. Cir. 2002); *Eli Lilly & Co. v. Barr Labs., Inc.*, 251 F.3d 955, 962 (Fed. Cir. 2001), cert. denied, 534 U.S. 1109, 151 L. Ed. 2d 879, 122 S. Ct. 913 (2002). The court must analyze GSE's motion for judgment as a matter of law under this heightened burden of proof. See *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 254, 91 L. Ed. 2d 202, 106 S. Ct. 2505 (1986) (holding that in ruling on motion for summary judgment, court must view evidence under applicable substantive evidentiary burden); *Wittekamp v. Gulf & W., Inc.*, 991 F.2d 1137, 1141-42 (3d Cir. 1993). GSE must demonstrate that, viewing the evidence in the light most favorable to PALP, the patents would be considered invalid by clear and convincing

evidence.

A

GSE moves for judgment as a matter of law or, alternatively, for a new trial on the ground the jury verdict regarding its on-sale bar defense is not supported by the trial evidence. It maintains that Gloucester Engineering's ("Gloucester's") 1987 sale to Gundle Lining [\*13] Construction Corp. ("Gundle") of a circular die with internal deckles capable of creating textured blown-film liner with a smooth edge constitutes an invalidating commercial sale.

It is possible that the jury found a material difference between "plugs" and "chokers" or "deckles," thus concluding that the Gundle process, which uses an internal deckle, is distinguishable from the '112 patent, which uses a plug. The court concludes, however, under the law that governs what constitutes the sale of a process that the jury could not have found that the die that Gloucester sold Gundle in 1987 constituted a commercial sale of the process. n8

n8 The court did not specifically instruct the jury on this issue.

In its summary judgment opinion, the court held under then-current case law that the sale of the Gloucester die to Gundle "presents no question as to whether there was a 'commercial offer' under the first prong of the *Pfaff* test." *Poly-Am., Inc. v. Serrot Int'l, Inc.*, 2001 U.S. Dist. LEXIS 17078, 2001 WL 1335793, at \*4 (N. [\*14] D. Tex. Oct. 18, 2001) (Fitzwater, J.) (citing *Group One, Ltd. v. Hallmark Cards, Inc.*, 254 F.3d 1041, 1046 (Fed. Cir. 2001)). The Federal Circuit subsequently clarified the first prong of the *Pfaff* test concerning the commercial sale of methods. In *In re Kollar*, 286 F.3d 1326 (Fed. Cir. 2002), the court held that sale of a method does not constitute a commercial sale or the commercialization of the method until the method has been put into commercial practice. n9

n9 The court reasoned:

A tangible item is on sale when, as we held in *Group One*, the transaction "rises

to the level of a commercial offer for sale" under the Uniform Commercial Code. When money changes hands as a result of the transfer of title to the tangible item, a sale normally has occurred. *A process, however, is a different kind of invention; it consists of acts, rather than a tangible item. It consists of doing something, and therefore has to be carried out or performed. A process is thus not sold in the same sense as is a tangible item. "Know-how" describing what the process consists of and how the process should be carried out may be sold in the sense that the buyer acquires knowledge of the process and obtains the freedom to carry it out pursuant to the terms of the transaction. However, such a transaction is not a "sale" of the invention within the meaning of § 102(b) because the process has not been carried out or performed as a result of the transaction. The same applies to a license to a patent covering a process. The Board in this case failed to recognize this distinction, and therefore erred in concluding that the license to the process under any future patents, and the accompanying description of that process, constituted a sale of the subject matter of those patents, viz., the process.*

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*Kollar*, 286 F.3d at 1332 (emphasis added) (citation omitted).

[\*15]

The proof is uncontroverted that the Gundle/Gloucester die was not used to produce textured blown-film liner with a smooth edge until April 2002. Therefore, under *Kollar* and the trial evidence the jury would have been required to find that a commercial sale of the process, within the meaning of 35 U.S.C. § 102(b), did not occur before April 2002. GSE is not entitled to judgment as a matter of law or a new trial based on its on-sale bar defense.

B

GSE contends that public knowledge of the Gloucester/Gundle die invalidates the '112 and '047 patents, and that the jury verdict rejecting this defense is not supported by substantial evidence or is against the great weight of the evidence.

"For prior art to anticipate under 35 U.S.C. § 102(a) because it is 'known,' the knowledge must be publicly accessible." *Minn. Mining & Mfg. Co. v. Chemque, Inc.*, 303 F.3d 1294, 1301 (Fed. Cir. 2002), cert. dismissed, U.S. , 155 L. Ed. 2d 533, 123 S. Ct. 1779 (2003). n10 "A patent claim is invalid if the invention recited in that claim was publicly known by others ... Private or secret knowledge, such as knowledge [\*16] confidentially disclosed within a small group, is not enough to invalidate a patent claim." Ct. Charge at 24.

n10 As the court explained in *Kimberly-Clark Corp. v. Johnson & Johnson*, 745 F.2d 1437 (Fed. Cir. 1984):

It has been unusual that opinions have explained the real reason for the denial of patent rights, which is the basic principle (to which there are minor exceptions) that no patent should be granted which withdraws from the public domain technology already available to the public. It is

available, in legal theory at least, when it is described in the world's accessible literature, including patents, or has been publicly known or in the public use or on sale "in this country." 35 U.S.C. § 102(a) and (b). That is the real meaning of "prior art" in legal theory--it is knowledge that is available, including what would be obvious from it, at a given time, to a person of ordinary skill in an art.

*Id.* at 1453 (citation omitted).

The jury's [\*17] rejection of this defense is supported by substantial evidence and is not against the great weight of the evidence. Friedrich Struve ("Struve"), the Gundle manager who requested that internal deckles be installed in the circular die purchased from Gloucester, was always discrete in his discussions of the Gloucester die. Although not under a confidentiality agreement, he was careful in discussing the details of the die. In circumstances in which discussing the modifications would have been both advantageous and logical--e.g., publicity at conferences and interviews--Struve did not discuss the die. Struve also testified that all Gundle employees were discrete concerning the Gloucester die and other company technologies. He expected all contractors who worked with his equipment to exercise the same discretion. The factory was not open to the general public, and it was not readily apparent from viewing the die that there were internal deckles capable of creating textured liner with smooth edge.

The jury could reasonably have found that information about the Gloucester/Gundle die was not available to the public and that, at most, it was available to a few companies that worked on modifying [\*18] the die or performed maintenance. This evidence does not show, under a clear and convincing evidence standard, that knowledge of the '047 product or '112 process was available to the public before the critical date.

C

GSE argues that the verdict regarding its prior invention defense is not supported by substantial evidence or, alternatively, is against the great weight of the evidence, given the prior creation of the Gundle/Gloucester die with internal deckles. The court holds that there is sufficient evidence to support a reasonable finding that the Gundle/Gloucester die had never been used to reduce the process or the product to practice.

Priority of invention goes to the first party to reduce an invention to practice unless the other party can show that it was the first to conceive of the invention and that it exercised reasonable diligence in later reducing that invention to practice. Priority therefore depends upon conception and reduction to practice.

\*\*\*

A reduction to practice can be either a constructive reduction to practice, which occurs when a patent application is filed, or an actual reduction to practice. In order to establish an actual reduction to practice, [\*19] the inventor must prove that: (1) he constructed an embodiment or performed a process that met all the limitations of the interference count; and (2) he determined that the invention would work for its intended purpose. Depending on the character of the invention and the problem it solves, determining that the invention will work for its intended purpose may require testing.

*Cooper v. Goldfarb*, 154 F.3d 1321, 1327 (Fed. Cir. 1998) (citations omitted).

The court provided the jury appropriate instructions about the general rule concerning reduction to practice:

As a general rule, the first person to reduce an invention to practice is said to be the first inventor. An invention is reduced to practice either when a patent application is filed or when the invention is made and shown to work for its

intended purpose. Thus if another person reduces to practice an invention before the inventor on the patent, then the reduction to practice by the other person will be prior art to the patent claims.

\*\*\*

There is, however, an important exception to this general rule. Someone who was first to conceive of an invention but reduced it to practice after someone [\*20] else will be the first inventor if he was the first to conceive of the invention and he exercised "reasonable diligence" in reducing the invention to practice from a time just before the other person's conception. Conception of an invention occurs when the inventor has formed the idea of how to make and use every aspect of the patented invention, and all that is required is that it be made, without the need for any further inventive effort. Reasonable diligence means that the inventor worked continuously on reducing the invention to practice. Interruptions necessitated by the everyday problems and obligations of the inventor or those working with him do not prevent a finding of diligence.

Ct. Charge at 29-30.

By citing evidence that the die was intentionally crafted to produce blown-film liner with a smooth edge using an object to disrupt the flow, GSE implicitly argues that there was reduction to practice in the creation and sale of the modified die. GSE cannot cite any evidence, however, of *actual use of the die*, before the PALP patent issued, to carry out the process of creating blown-film liner with a smooth edge. Reduction of a process to practice requires the actual [\*21] performance of the process. *See Shurie v. Richmond*, 699 F.2d 1156, 1159 (Fed. Cir. 1983) ("Generally, the invention of a process is completed, or reduced to practice, when it is successfully performed."); *Scott v. Koyama*, 281 F.3d 1243, 1247 (Fed. Cir. 2002) ("An actual reduction to practice of a chemical process generally requires performance of the process."); *Corona Cord Tire Co. v. Dovan Chem. Corp.*, 276 U.S. 358, 383, 72 L. Ed. 610, 48 S. Ct. 380, 1928

*Dec. Comm'r Pat. 253 (1928)* ("A process is reduced to practice when it is successfully performed."). The evidence permitted the jury reasonably to find that the '112 process was not performed using the Gundle/Gloucester die until April 2002, well after PALP obtained the patent. Moreover, the fact that the blown-film textured liner with a smooth edge was not created with the Gundle/Gloucester die until 2002 also means that the product covered by the '047 patent was not reduced to practice before PALP's patent issued. The jury reasonably refused to find in GSE's favor on the defense of prior invention as it related to the product patent. GSE's motion for judgment as a matter of law or a new trial is denied [\*22] on this basis.

#### D

GSE challenges the verdict on the defense of obviousness, arguing that it is not supported by substantial evidence or is against the great weight of the evidence. GSE maintains that the combination of separate technologies extant before the invention of the '112 process and the '047 product renders the innovations in the PALP patents inconsequential and invalid. Applying the clear and convincing evidence standard, the court rejects GSE's position.

35 U.S.C. § 103(a) allows a claimed invention to be held invalid

though the invention is not identically disclosed or described as set forth in [35 U.S.C. § 102], if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

The Supreme Court explained the method for determining obviousness in *Graham v. John Deere Co.*, 383 U.S. 1, 15 L. Ed. 2d 545, 86 S. Ct. 684 (1966):

Under § 103, the scope and content of the prior art are [\*23] to be determined; differences between the prior art and the

claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others [to solve the problem], etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, the inquiries may have relevancy.

*Id.* at 17-18. Once the *Graham* findings are made, the court must determine the obviousness of the claimed invention as a whole. The test is not whether the differences between the claimed invention and the prior art were obvious, but rather whether the claimed invention as a whole was obvious. *See Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 890 (Fed. Cir. 1984). Facts underlying a determination of obviousness must be proved by clear and convincing evidence. *Carella v. Starlight Archery & Pro Line Co.*, 804 F.2d 135, 138 (Fed. Cir. 1986). [\*24]

In determining obviousness, the court considers what the prior art collectively suggests to one of ordinary skill in the art. *Leinoff v. Louis Milona & Sons, Inc.*, 726 F.2d 734, 739 (Fed. Cir. 1984), *overruled on other grounds by A.C. Aukerman Co. v. R.L. Chaides Constr. Co.*, 960 F.2d 1020 (Fed. Cir. 1992). Teachings of the prior art, however, cannot be combined to declare an invention obvious absent some teaching, suggestion, or other incentive in the art to combine the teachings. *Carella*, 804 F.2d at 140. The invention must have been obvious at the time it was made; the court cannot use hindsight to reconstruct the invention from the prior art and find that the invention was obvious. *Id.*; *see W. L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983), *abrogated on other grounds by Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (en banc).

"Although it is well settled that the ultimate determination of obviousness is a question of law, it is also well understood that there are factual issues underlying the ultimate obviousness decision." *McGinley*

*v. Franklin Sports, Inc.*, 262 F.3d 1339, 1349 (Fed. Cir. 2001). [\*25] Jurors must determine "(1) the scope and content of the prior art; (2) the differences between the claims and the prior art; (3) the level of ordinary skill in the pertinent art; and (4) secondary considerations, if any, of nonobviousness." *Id.*; see *Graham*, 383 U.S. at 17-18.

Secondary, objective considerations of nonobviousness are often the most pertinent and convincing pieces of evidence available to a factfinder making an obviousness determination. *Litton Sys., Inc. v. Honeywell, Inc.*, 87 F.3d 1559, 1569 (Fed. Cir. 1996) ("Objective considerations may often be the most probative and cogent evidence of nonobviousness in the record.") (citing *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538 (Fed. Cir. 1983)), *vacated on other grounds*, 520 U.S. 1111, 137 L. Ed. 2d 323, 117 S. Ct. 1240(1997). Such evidence allows a jury to determine obviousness without falling into the "trap of hindsight." *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 960 (Fed. Cir. 1986). Factfinders may consider the following secondary factors: (1) commercial success of products covered by the patent claims or made by a process covered [\*26] by the patent claims; (2) a long-felt need for the invention; (3) failed attempts by others to make the invention; (4) copying of the invention by others in the field; (5) unexpected results achieved by the invention; (6) praise of the invention by the infringer or others in the field; (7) the taking of licenses under the patent by others; (8) expressions of surprise by experts and those skilled in the art at the making of the invention; and (9) the patentee proceeded contrary to accepted wisdom of prior art. See Ct. Charge at 34. These elements are relevant only where there is a connection or nexus between them and the merits of the patented invention. *Litton*, 87 F.3d at 1569.

GSE posits that the combination of products and technologies extant at the time of the inventions renders the '112 and '047 *patents* obvious and thus invalid. It asserts that the combination of the knowledge of deckles used to block flow and information in the Koerner textbook, the 1994 Geosynthetic Research Institute conference proceedings, and the existing flat die technologies used to create textured liner with smooth edges indicates the simplicity and obviousness of the '047 and '112 [\*27] *patents*. GSE contends the existence of the Gundle/Gloucesterc die and Cloeren patent (patenting the use of non-planar restrictor bars) indicates that others had easily arrived at concepts similar to those in the '047

and '112 *patents*.

Although the combination of concepts and the existence of the Gundle/Gloucesterc die and Cloeren patent provide some evidence that a person of ordinary skill in the art would find the patented product obvious, there is opposing evidence in the record. For example, PALP witnesses testified extensively that it was conventional wisdom regarding circular dies that insertion of an object in the die could cause irreversible or costly damage to a large, expensive die. The idea of creating a plug to insert into the die was considered risky and controversial, even within PALP.

Moreover, there is extensive objective, secondary evidence of nonobviousness. The PALP process created a product that was a cheaper textured landfill liner with a smooth edge. It enabled the manufacture of an easily-welded product produced cheaply in a single step. The invention satisfied the long-felt need for an inexpensive and easily welded textured liner that has had enormous commercial [\*28] success. The trial evidence includes a letter that Robert M. Koerner, Ph.D. ("Dr. Koerner"), a recognized expert, sent to PALP congratulating it on the newly-patented process and product. n11 This objective evidence, which is far less prone to the distorting lens of hindsight, strongly points to the nonobviousness of the '047 and '112 *patents*.

n11 Although GSE attempted to establish that Dr. Koerner was typically generous in doling out praise, the jury was free to assess the evidence favorably to PALP.

Therefore, taking the evidence in the light most favorable to PALP, a jury could reasonably have determined that GSE did not prove obviousness by clear and convincing evidence. Nor is the verdict against the great weight of the evidence. The court therefore denies GSE's motion for judgment as a matter of law or a new trial on this ground.

#### IV

GSE moves for judgment as a matter of law or a new trial on the ground that Serrot did not willfully infringe the '047 and '112 *patents*. GSE argues that the willfulness verdict [\*29] is not supported by substantial evidence

such that a reasonable jury could have found willfulness by clear and convincing evidence.

A

"More is necessary to support a finding of 'willfulness' than that the infringing acts were not inadvertent. [A factfinder] must determine that the infringer acted in disregard of the patent, that is, that the infringer had no reasonable basis for believing it had a right to do the acts." *Stickle v. Heublein, Inc.*, 716 F.2d 1550, 1565 (Fed. Cir. 1983). The jury must determine whether "a reasonable person would prudently conduct himself with any confidence that a court might hold the patent invalid or not infringed." *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 1428 (Fed. Cir. 1988).

"Willfulness is a determination as to state of mind," *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 828 (Fed. Cir. 1992), *abrogated on other grounds by Markman*, 52 F.3d 967, or intent, *see Ortho Pharmaceutical Corp. v. Smith*, 959 F.2d 936, 944 (Fed. Cir. 1992), and is determined by examining the totality of the circumstances surrounding the infringement, *see Comark Communications, Inc. v. Harris Corp.*, 156 F.3d 1182, 1190 (Fed. Cir. 1998). [\*30] "In determining whether willfulness has been shown, we look to the totality of the circumstances, understanding that willfulness, as in life, is not an all-or-nothing trait, but one of degree. It recognizes that infringement may range from unknowing, or accidental, to deliberate, or reckless, disregard of the patentee's legal rights." *Id.* (internal quotation marks omitted). The court and jury should take into consideration, *inter alia*, evidence of copying, investigation resulting in a good faith belief of non-infringement or invalidity, or behavior during litigation. *See Bott v. Four Star Corp.*, 807 F.2d 1567, 1572 (Fed. Cir. 1986), *overruled on other grounds by Aukerman*, 960 F.2d 1020.

The existence of an opinion letter is an "important factor in determining the willfulness of infringement[.]" *Ortho*, 959 F.2d at 944. "One who has actual notice of another's patent rights has an affirmative duty to respect those rights. That affirmative duty normally entails obtaining advice of legal counsel although the absence of such advice does not mandate a finding of willfulness." *Read*, 970 F.2d at 828 (citation omitted). [\*31] "Breach of this duty is merely one of the factors to be considered in ascertaining an infringer's state of mind." *Mach. Corp. of Am. v. Gullfiber AB*, 774 F.2d 467, 472 (Fed. Cir. 1985); *see Kloster Speedsteel AB v. Crucible Inc.*, 793

*F.2d 1565, 1579 (Fed. Cir. 1986)* ("Though it is an important consideration, not every failure to seek an opinion of competent counsel will mandate an ultimate finding of willfulness."). Nevertheless, willful infringement can be found despite an accused infringer's obtaining an opinion letter. "Those cases where willful infringement is found despite the presence of an opinion of counsel generally involve situations where opinion of counsel was either ignored or found to be incompetent." *Read*, 970 F.2d at 828-29. The validity of the letter does not depend upon its legal correctness, because the willfulness question arises only when the opinion was incorrect. *See Ortho*, 959 F.2d at 944. Furthermore,

a client [need not] be able to evaluate the legal competence of its attorney's advice to avoid a finding of willfulness. The client would not need the attorney's advice at all in that [\*32] event. That an opinion is "incompetent" must be shown by objective evidence. For example, an attorney may not have looked into the necessary facts, and, thus, there would be no foundation for his opinion. A written opinion may be incompetent on its face by reason of its containing merely conclusory statements without discussion of facts or obviously presenting only a superficial or off-the-cuff analysis.

*Read*, 970 F.2d at 829. n12

n12 GSE argues that willfulness is precluded in this case because the infringement suit and the notice occurred simultaneously. It cites *Gustafson, Inc. v. Intersystems Industrial Products, Inc.*, 897 F.2d 508 (Fed. Cir. 1990), to support its contention. *Gustafson* stands for the general proposition that ambushing an infringer with a lawsuit and notice of the patent simultaneously, just after issuance of the patent, provides no indication or inference of knowing or willful intent to infringe the patent. *See id.* at 510-11. This uncontroversial proposition does not apply to the facts of the present case, where there was evidence that Serrot executives

knew of the existence of the patents well before infringement began.

[\*33]

B

When taken in the light most favorable to PALP, the evidence permitted the jury reasonably to find willfulness by clear and convincing evidence. The jury, as judge of the facts, was entitled to believe that Serrot executives Robert Otto and Gary Joachim were put on notice of the new patent in June 1998. Although Serrot did not begin production of the product until after National Seal Company ("NSC") was acquired in August 1999, these executives and, in turn, the company were aware of the potential infringement at the commencement of production and did not take the time to investigate patent validity. PALP introduced expert testimony that due diligence during the acquisition of NSC should have raised the issue of possible patent infringement.

GSE maintains, however, that Serrot obtained an opinion letter from McDonnell Boehnen Hulbert & Berghoff ("McDonnell"), a reputable patent law firm, that the patents-in-suit were invalid. PALP introduced significant, largely uncontradicted expert testimony, however, from Edward G. Fiorito, Esquire ("Fiorito") that there were significant objective factors that indicated the incompetence of the opinion. He specifically opined that it was unreasonable [\*34] for Serrot to have relied on the opinion letter. Primarily, Fiorito testified that the use of boilerplate legal analysis, conclusory remarks without substantive analysis, omissions of central and important case law and factual materials, and the mere 14 hours and \$ 4,000 in legal fees spent preparing the opinion indicate its incompetence. Fiorito testified that the opinion did not address any of the patent claims, did not apply prior art to the claims, and did not include claim charts that demonstrated a detailed analysis of claims. Fiorito opined as an expert that the McDonnell opinion was not a competent opinion and that Serrot could not reasonably have relied upon it. *See* Tr. 3:23-24. n13 Moreover, Serrot's general counsel testified that he took no action to verify or even spot check McDonnell's opinion letter.

n13 Citations to "Tr." are to the volume and page of the trial transcript.

GSE's "burden to show that no reasonable juror could find the asserted proof of willfulness rose to the quantum of clear [\*35] and convincing evidence is a heavy one." *Comark, 156 F.3d at 1190* (internal question marks and alteration omitted). GSE stresses a number of pieces of evidence that it maintains refute the proof that would support a willfulness determination. "Simply because evidence is offered at trial[, however,] does not mean that the court must assume the jury believed the evidence or gave it the same weight as does the profferor of such evidence." *Id. at 1192*. The court recognizes that the existence of a legal opinion from reputable patent counsel make this a close case, *see infra* at § VII (declining to award increased damages). Nevertheless, the court holds that the jury could reasonably have found by clear and convincing evidence that the infringement was willful. Moreover, the existence of significant evidence of the incompetence of the opinion and delay in obtaining legal advice after the merger of NSC and Serrot preclude the court from granting a new trial. The jury verdict is not against the great weight of the evidence. Therefore, the court denies GSE's motion for judgment as a matter of law or for a new trial based on the jury's willfulness verdict. [\*36]

V

GSE moves for judgment as a matter of law on the jury's damages award and for a new trial, contending the award is against the great weight of the evidence. GSE avers that the testimony of Keith R. Ugone, Ph.D. ("Dr. Ugone") and Fiorito, PALP's damages experts, was insubstantial because it was based upon poor methodology, that Poly-America, Inc. ("Poly-America") n14 as the mere manufacturer but not marketer of the product is not entitled to recover lost profits, and that the jury must have double counted in computing damages. PALP opposes the motion, arguing that the verdict is based upon Dr. Ugone's sound expert opinion, that Poly-America and its sales arm, Poly-Flex, Inc. ("Poly-Flex"), can be treated as one economic unit (thus supporting a lost profits award), and that the jury reasonably made a damages finding well within the range to which PALP's experts testified.

n14 For clarity, *see supra* note 1, the court will refer in this section to Poly-America as the plaintiff.

A

The court considers first [\*37] whether lost profits may be recovered where Poly-America lacked a marketing and sales arm to sell the patented product it manufactured.

PALP and Dr. Ugone both treated Poly-America and its much smaller sister sales corporation, Poly-Flex, as a single economic unit for purposes of computing lost profits. They imputed Poly-Flex's lost sales to Poly-America. GSE posits that Poly-America, as the mere manufacturer, is not entitled to an award of lost profits because it made no sales. It relies primarily upon *Hebert v. Lisle Corp.*, 99 F.3d 1109 (Fed. Cir. 1996), *Trell v. Marlee Electronics Corp.*, 912 F.2d 1443 (Fed. Cir. 1990), *Carver v. Velodyne Acoustics, Inc.*, 202 F. Supp.2d 1147 (W.D. Wash. 2002), and *Abbott v. Barrentine Manufacturing Co.*, 255 F. Supp. 890 (N.D. Miss. 1966). n15 These cases are inapposite.

n15 GSE also cites language in the court's charge to the jury that, as GSE quotes it, appears to suggest that only sales that Poly-America made can be used to compute lost profits. GSE implies that Poly-America is not entitled to lost profits because it did not make any sales. When read in context, however, the charge only suggests that Poly-America is due lost profits for product that would have been sold as opposed to all of the product that Serrot produced and sold illegally.

[\*38]

Both *Hebert* and *Trell* stand for the very general and sensible proposition that a company or individual who is not producing and selling product in the marketplace should not be allowed to recover lost profits. In other words, an individual who is clearly sitting on his patent is only able to recover for the reasonable royalties lost when others proceed to produce the product. See *Hebert*, 99 F.3d at 1119-20; *Trell*, 912 F.2d at 1445. This principle is inapplicable in the instant case where Poly-America and its sales arm, Poly-Flex, were actively engaged in producing and selling the '047 patented product.

In *Carver* the plaintiff and patent holder, Carver, was a member of an S-corporation that produced the patented

product. Carver sued in his individual capacity to recover lost profits. The court held that an individual who was not himself involved in manufacturing or marketing the product could not funnel the lost profits award directly to himself. It determined that Carver could not "take advantage of the corporate form and simultaneously shun its disadvantages." *Carver*, 202 F. Supp.2d at 1149. *Carver* is therefore distinguishable [\*39] on its facts. Carver, as essentially a shareholder, hoped to reap individually profits that were due his company, not him. In the present case, however, Poly-America is not attempting to bypass the individual or corporation that incurred the lost profits.

Similarly, in *Abbott* the major owner of a company granted a license to his company to produce a patented product. The court stated in *dicta* that, where the individual is the named plaintiff and is not himself producing or selling product, the damages should be limited to those incurred by the individual, i.e., royalties only. See *Abbott*, 255 F. Supp. at 901. Poly-America is not suing in its individual capacity and funneling profits into its own pocket that should be shared by owners of the corporation. Poly-America is instead seeking profits to which it is entitled.

In the apparent absence of case law concerning this particular issue, the court is persuaded by the more general policy considerations that inform damages awards in patent cases.

The damages award remains premised on the principle stated in *Aro Manufacturing Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 12 L. Ed. 2d 457, 84 S. Ct. 1526, 1964 Dec. Comm'r Pat. 760 (1964), [\*40] that is, what would the patentee have earned but for the infringement. Applying this principle in [*Stickle*] the court stated:

As a final matter we would add that the trial court may award an amount of damages greater than a reasonable royalty so that the award is "adequate to compensate for the infringement."

*Hebert*, 99 F.3d at 1120 (quoting *Stickle*, 716 F.2d at 1563). The jury could reasonably have found that, had Serrot not infringed, Poly-America would have earned these profits. It is therefore reasonable and analytically sound to treat Poly-America and Poly-Flex as an economic unit and award damages to Poly-America for the sales lost.

B

The court next addresses the testimony of Dr. Ugone. Dr. Ugone gave expert testimony and a report that analyzed lost profits under the *Panduit* factors, n16 and he expressed an opinion concerning the amount of the infringing sales that Poly-America would have made.

n16 *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152 (6th Cir. 1977).

[\*41]

GSE essentially challenges the admissibility of Dr. Ugone's testimony, arguing that it was unreliable and premised on a faulty factual predicate. It maintains that the court should hold that his opinion does not support an award of lost profits. GSE also posits that Dr. Ugone distorted and skewed the market share analysis, rendering his market share opinion unreliable. GSE basically reasserts and supplements its pretrial *Daubert* n17 motion concerning Dr. Ugone's expert opinions.

n17 *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579, 125 L. Ed. 2d 469, 113 S. Ct. 2786 (1993).

GSE's objections relate to the weight and efficacy of Dr. Ugone's expert opinion, not to the competence or reliability of his methodology. The jury had reliable evidence that it was entitled to credit (or reject) concerning the amount of lost profits. GSE had ample opportunity to cross-examine Dr. Ugone and to proffer the testimony of its own expert, who challenged Dr. Ugone's conclusions. GSE is not entitled to judgment [\*42] as a matter of law or a new trial on this basis. n18

n18 GSE also moves for judgment as

a matter of law or a new trial based on a lack of evidence concerning convoyed sales of smooth liners and Fiorito's reasonable royalty rate testimony. The arguments regarding these issues are very similar to the objections to Dr. Ugone's testimony on lost profits. Essentially, GSE disputes the expert opinions presented on these issues. These arguments relate to the weight of the evidence, not to its admissibility. GSE had a fair opportunity to impeach the evidence through cross-examination and the introduction of rebuttal testimony. The court denies judgment as a matter of law or a new trial on these grounds as well.

C

GSE also contends that the jury double counted damages. It argues that using the maximum reasonable royalty rates and maximum profit rates per pound, the jury could not have arrived at total damages of \$ 12,231,659.70 without having double counted 2,429,691 pounds of infringing product.

The reasonable royalty [\*43] and lost profits determinations are substantially interrelated because the fewer lost profits incurred the greater the pounds that are considered in the reasonable royalty award. Therefore, if the jury awarded \$ 7,150,000 in lost profits, it could not, based upon the trial evidence, have reasonably awarded more than \$ 5 million in reasonable royalties. Conversely, awarding \$ 5 million in reasonable royalties means that an award of \$ 7.15 million in lost profits is not supported by the evidence.

Where a new trial is appropriate because the jury made a factual finding of an excessive damages award that goes against the great weight of the evidence, n19 the court can condition the denial of a new trial upon the acceptance of a remittitur. See *Evers v. Equifax, Inc.*, 650 F.2d 793, 797 (5th Cir. Unit B July 1981) (citing *Glazer v. Glazer*, 274 F. Supp. 471 (E.D. La. 1967)); 11 Wright & Miller, *supra*, § 2815). Moreover, the court may act *sua sponte*. See *Vadie v. Miss. State Univ.*, 218 F.3d 365, 378 (5th Cir. 2000) ("Although we note that MSU did not ask for remittitur when it sought judgment as a matter of law or, in the alternative, [\*44] a new trial after the jury rendered its verdict, it would have been within the district

court's discretion to *sua sponte* suggest remittitur."). "An award of damages by a jury [justifies a new trial when] it is clearly not supported by evidence, grossly excessive, or based only on speculation and guesswork." *Interactive Pictures Corp. v. Infinite Pictures, Inc.*, 274 F.3d 1371, 1376 (Fed. Cir. 2001), *cert. denied*, 537 U.S. 825, 154 L. Ed. 2d 36, 123 S. Ct. 112 (2002); see *Oiness v. Walgreen Co.*, 88 F.3d 1025, 1031 (Fed. Cir. 1996) ("This court upholds a jury's damages award unless 'grossly excessive or monstrous,' clearly not supported by evidence, or based only on speculation or guesswork."). The Fifth Circuit has determined that an award should stand when it is "within the universe of possible awards which are supported by the evidence," *Bonura v. Sea Land Service, Inc.*, 505 F.2d 665, 670 (5th Cir. 1974), but not when "a jury's award exceeds the bounds of any reasonable recovery," *Brunnemann v. Terra International, Inc.*, 975 F.2d 175, 178 (5th Cir. 1992) (quoting *Hansen v. Johns-Manville Products Corp.*, 734 F.2d 1036, 1046 (5th Cir. 1984)). [\*45] In determining a new trial or remittitur based upon a jury's damages award, the court is "circumscribed by the *Seventh Amendment* [and] must not substitute [its] judgment of damages for that of the jury." *Bonura*, 505 F.2d at 669. In the Fifth Circuit the amount of the remittitur is governed by the "maximum recovery rule," i.e., courts can reduce an award only to "the maximum amount the jury could properly have awarded." *Brunnemann*, 975 F.2d at 178 (quoting *Hansen*, 734 F.2d at 1046).

n19 Remittitur is not appropriate where the damages awarded are so excessive that it is clear that they were motivated by prejudice or emotion. In such cases the possibility that the bias carried over to the liability determination necessitates a new trial. See *Whitehead*, 163 F.3d at 278.

The court holds that the jury verdict is unreasonable in its award of reasonable royalties and conditions the granting of a new trial on PALP's acceptance of a remittitur of \$ [\*46] 266,502.00. Viewing the evidence favorably to PALP and assuming a resin cost savings of \$ 0.04 per pound and a die installation cost of \$ 250,000, instead of the more conservative estimates used by Dr. Ugone (\$ 0.02 per pound resin cost savings and \$ 300,000 die installation cost), the jury could reasonably

have found lost profits of \$ 7,150,000 with approximately 21,938,362 pounds of lost product sales. This leaves approximately 60,189,472 pounds of product that should be considered in the reasonable royalty analysis. If that poundage is multiplied by \$ 0.08--the highest reasonable royalty rate in evidence--the maximum award of reasonable royalty damages is approximately \$ 4,815,158.00--about \$ 266,502.00 less than the jury verdict of \$ 5,081,659.70. The sum of \$ 4,815,158.00 is the maximum reasonable royalty damages award supported by the trial evidence. Therefore, the court conditions the denial of a new trial upon PALP's acceptance of a remittitur of \$ 266,502.00 of the reasonable royalty award. If PALP does not accept this remittitur within 20 days of the date this memorandum opinion and order is filed, the court will grant a new trial.

n20

n20 The court has chosen to uphold the lost profits determination and compute the maximum reasonable royalty award because setting the reasonable royalty award and then recalculating the maximum lost profits arrives at a lower total damages award and a larger remittitur. As explained above, the court must remit the damages to the maximum amount supportable by the evidence.

[\*47]

VI

GSE moves for a new trial based upon alleged misconduct by PALP's counsel and erroneous trial rulings by the court.

A

A motion for new trial based on the conduct of the parties, the court, or trial error is subject to harmlessness review. See *Rule 61*. The test for harmlessness has been set out in *Kotteakos v. United States*, 328 U.S. 750, 90 L. Ed. 1557, 66 S. Ct. 1239 (1946), n21 and its progeny, see *O'Rear v. Fruehauf Corp.*, 554 F.2d 1304, 1308 (5th Cir. 1977) ("A trial judge, when faced with a motion for mistrial based on the submission of prejudicial information to a jury, must determine whether the error is harmless or whether it affects the substantial rights of the parties within the meaning of *Fed. R. Civ. P. 61*. The test

for this determination is set out in *Kotteakos*["] (footnote omitted)); *see* 11 Wright & Miller, *supra*, § 2883.

n21 Although this is a criminal case, it establishes the governing standards.

Under *Kotteakos* and subsequent case [\*48] law, GSE must establish that any trial error by counsel or the court resulted in actual prejudice, which must be evaluated in the context of the entire proceeding. *See Kotteakos*, 328 U.S. at 764. If the court is confident that the trial error did not significantly influence the outcome, it must find the error was harmless. *Id.* at 764-65. If, however, there is grave doubt about the influence of the error, the court cannot consider the error harmless. *O'Neal v. McAninch*, 513 U.S. 432, 437-38, 130 L. Ed. 2d 947, 115 S. Ct. 992 (1995). Accordingly, absent such a grave doubt, GSE is not entitled to a new trial.

#### B

GSE argues first that the court erroneously sustained an objection to the admission of the license agreement between GSE n22 and PALP. The court excluded the license agreement because the parties entered into it as the result of a settlement agreement, and it was therefore irrelevant and prejudicial under *Fed. R. Evid.* 402 and 403. GSE contends the exclusion of this exhibit allowed the jury to believe that Serrot was willfully infringing the patents-in-suit. It maintains that excluding the license agreement enabled Dr. Ugone [\*49] to testify that GSE was not a competitor in the market for textured film with smooth edges. Even assuming *arguendo* that the court erred, GSE has not demonstrated that it is entitled to a new trial.

n22 The court refers here to GSE itself rather than to GSE as successor-in-interest to Serrot. *See supra* note 1.

GSE clarified during trial that any product that GSE produced was not included in the millions of pounds of infringing product at issue. *See* Tr. 4:28. Furthermore, GSE fails to cite a place in the trial record where it objected to or contested the testimony that GSE did produce textured blown-film liner with a smooth edge.

GSE stipulated that it began producing textured blown-film liner with a smooth edge in July 2002. It did not cross-examine PALP witness George M. Hall on this issue. Even when GSE proffered its bill to preserve this alleged error, it did not suggest that it sought to introduce the license agreement to negate an inference that Serrot was willfully infringing the patents. Without [\*50] an attempt to use the license evidence in this way, the court's ruling cannot be the cause of any error regarding the inference of willful infringement. GSE has therefore failed to demonstrate prejudice. The court does not have a grave doubt that the outcome of the trial would have been different had it admitted the license agreement in evidence, and it declines to grant a new trial on this basis.

Furthermore, there is no prejudice resulting from the inability to cross-examine Dr. Ugone on his testimony regarding market share. Dr. Ugone testified that he did not include GSE in the relevant market analysis because he "knew GSE did not have that product. They had the cast spray-on process." Tr. 4:83. GSE argues that had it been able to introduce the license agreement it would have impeached this testimony. Dr. Ugone's testimony was not inaccurate. Although GSE had a license, it did not produce a product or offer it to customers until after the acquisition of Serrot, and it would seem logical to exclude GSE from the realm of competitors. Moreover, Dr. Ugone adjusted his estimates concerning competitors in the market of textured blown-film liner with a smooth edge:

I knew GSE [\*51] did not have that product. They had the cast spray-on process. But we had very, very little data on the other players. And so as a conservative assumption I said, okay, let me assume that some of those sales would have also gone to the other players, although we know that they really don't have a comparable product, I built that in as conservatism.

Tr. 4:83. The nature of Dr. Ugone's opinion removed any prejudice that might have resulted from GSE's exclusion from the market analysis. Moreover, Dr. Ugone acknowledged GSE's production of the patented product after the acquisition of Serrot by including that production in his analysis of the demand for the patented product.

Finally, GSE effectively cross-examined Dr. Ugone regarding his failure to include GSE in his lost profits market analysis. GSE was able during its questioning of Dr. Ugone to obtain an admission that he did not include GSE's products in the market share even though GSE had a textured liner with smooth edges (although not blown-film textured liner with a smooth edge). He also acknowledged that if GSE's product had been included, it would have reduced the lost profit calculation by millions of dollars. GSE [\*52] impeached Dr. Ugone on cross-examination despite the fact that the license agreement between GSE and PALP was not admitted in evidence. The fact that the jury did not credit GSE's impeachment and that it instead apparently found that he had been rehabilitated does not indicate that GSE incurred prejudice. The court is confident that the exclusion of the license agreement evidence, even if erroneous, did not alter the outcome of the case. It therefore denies a new trial on this basis.

GSE posits that Fiorito's testimony regarding the delay between the time Serrot executives were put on notice of the patent was inaccurate, resulting in prejudice. n23 Fiorito testified that there was a delay of almost two years from the time Serrot executives learned of the patents to the time they received advice from counsel. Serrot did not begin to infringe the patents until the merger with NSC more than a year after Serrot executives learned of the patent. The inaccuracy of the testimony was significantly tested upon cross-examination, which revealed its inaccuracy. This cross-examination addressed the inaccuracy and impeached Fiorito as a witness. Where questionable witness testimony is exposed [\*53] to impeachment by the party moving for a new trial, the truth or falsity of the testimony is left to the jury and a new trial is inappropriate. *See Slavin v. Curry*, 690 F.2d 446, 449 (5th Cir. 1982); *Reierson v. Miss. Shipping Co.*, 268 F.2d 613, 615 (5th Cir. 1959). The court discerns no prejudice resulting in this testimony and declines to grant a new trial on this basis. n24

n23 This is not an instance of an improper judicial ruling. Nevertheless, the court will evaluate whether the false or inaccurate testimony resulted in actual prejudice that would result in an incorrect outcome.

n24 GSE also argues that the fact that

the jury sent the court a note requesting evidence regarding what Serrot did to investigate the potential infringement at the time infringement began suggests that it had strayed far from the court's instructions. The court disagrees. The jury was entitled to consider the totality of the circumstances in evaluating the issue of willful infringement. The investigation of potential infringement at the commencement of production is particularly relevant to a willfulness determination.

[\*54]

## VII

PALP moves for increased damages based upon the jury verdict of willfulness and Serrot's culpability in infringing the patents.

## A

"The court may increase the damages up to three times the amount found or assessed." 35 U.S.C. § 284. "Absent [further] statutory instructions [the Federal Circuit] interpreted the increased damages part of section 284 as requiring a two step process. First, the fact-finder must determine whether an infringer is guilty of conduct upon which increased damages may be based." *Jurgens v. CBK, Ltd.*, 80 F.3d 1566, 1570 (Fed. Cir. 1996) (citation omitted). "Because increased damages are punitive, the requisite conduct for imposing them must include some degree of culpability. An act of willful infringement satisfies this culpability requirement and is, without doubt, sufficient to meet the first requirement to increase a compensatory damages award." *Id.* (citations omitted). A finding of willful infringement, however, does not require the imposition of increased damages in the second step of the court's evaluation of increased damages. *See Read*, 970 F.2d at 826.

At the second step, the court [\*55] must "determine[], exercising its sound discretion, whether, and to what extent, to increase the damages[.]" *Id.* at 1570. The court, reviewing the totality of the circumstances, both enhancing and mitigating, *see Read*, 970 F.2d at 826 ("The court must consider factors that render defendant's conduct more culpable, as well as factors that are mitigating or ameliorating."), must

determine the egregiousness of the defendant's conduct during the infringement and as a party to the litigation, *Jurgens*, 80 F.3d at 1571-72; accord *Read*, 970 F.2d at 826.

A number of factors that have been deemed particularly relevant in determining egregiousness should be used in determining the level of increased damages: (1) whether the infringer deliberately copied the ideas or design of another; (2) whether the infringer, when he knew of the other's patent protection, investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed; (3) the infringer's behavior as a party to the litigation; (4) the defendant's size and financial condition; (5) the closeness of the case; (6) the duration of the [\*56] defendant's misconduct; (7) the remedial action by the defendant; (8) the defendant's motivation for harm; and (9) whether the defendant attempted to conceal its misconduct. *See Read*, 970 F.2d at 827. "Use of these factors in patent cases is in line with punitive damage considerations in other tort contexts." *Id.* at 827-28.

The court must provide an explanation for the increased damages award to facilitate appellate review, especially where treble damages are awarded, *see id.* at 828, or the court determines that no enhancement is appropriate despite willful infringement, *see Jurgens*, 80 F.3d at 1572 ("Upon a finding of willful infringement, a trial court should provide reasons for not increasing a damages award or for not finding a case exceptional for the purpose of awarding attorneys fees.").

#### B

PALP identifies in its brief the *Read* factors that it contends support a finding of increased damages. Based on these factors it argues for an award of treble damages. PALP relies specifically on the second factor (maintaining that there was no good faith belief regarding non-infringement), third factor (contending [\*57] that GSE engaged in abusive litigation conduct), fourth factor (relying on GSE's size and financial condition to argue for a significant punitive award for deterrent value), fifth factor (positing that the case was not close), sixth factor (citing the lengthy duration of Serrot's infringement), and seventh factor (contending Serrot did not take remedial action on learning of the infringement).

Given the jury's willfulness verdict, the court acknowledges that PALP has satisfied the threshold level

of culpability in step one of the enhanced damages analysis. The *Read* factors, however, lead the court to exercise its discretion to deny enhanced damages.

The court relies principally on the following facts in declining to increase the damages. First, there was no evidence of copying by Serrot. Second, Serrot and GSE have conducted themselves respectably and ethically throughout this litigation, and were involved in only one discovery dispute (which, in the court's experience, is relatively rare in patent litigation). The court is not persuaded that GSE or Serrot acted improperly in conducting the April 2002 experiment. Nor does the court find that GSE's concern about arbitration under [\*58] the GSE-PALP Technology Licensing Agreement ("TLA")--after PALP successfully substituted GSE as the party-defendant over GSE's objection--was improper or disruptive. Third, this case presented several close questions for the jury, including the willfulness issue. Although, as the court has already explained, the evidence permitted the jury reasonably to find willfulness, the question was a close one, especially considering Serrot's reliance on an opinion letter by a competent firm that specializes in intellectual property law. Furthermore, the invalidity arguments presented facially viable defenses that, although ultimately unsuccessful, require resolution by the jury. The defenses presented a plausible case for invalidity given the relative simplicity of the '112 and '047 patents and the existence of a die that GSE could reasonably have believed was prior art. Fourth, Serrot made no attempt to conceal its production of the patented product or its use of the patented process. Fifth, despite the willfulness verdict, there is no evidence of pernicious intent by Serrot. It did not attempt to put PALP out of business or specifically to steal its advantage. Sixth, there was no need for [\*59] Serrot to cease infringement as a form of remedial action where there were plausible invalidity defenses.

Accordingly, the court finds in its discretion that it should not enhance the extensive damages that the jury has already awarded PALP.

#### VIII

PALP moves the court to establish the amount of a prejudgment interest award.

#### A

Prejudgment interest should ordinarily be awarded in

patent cases. See 35 U.S.C. § 284; *Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 655, 76 L. Ed. 2d 211, 103 S. Ct. 2058 (1983) ("The standard governing the award of prejudgment interest under § 284 should be consistent with Congress' overriding purpose of affording patent owners complete compensation. In light of that purpose, we conclude that prejudgment interest should ordinarily be awarded."). Interest is awarded "from the date of infringement to the date of payment, since only such award will satisfy Congress' overriding purpose in section 284 of affording patent owners complete compensation." *Bio-Rad Labs., Inc. v. Nicolet Instrument Corp.*, 807 F.2d 964, 967 (Fed. Cir. 1986) (internal quotation marks and brackets omitted).

Whether interest [\*60] is to be compounded and what interest rate will be used are left to the broad discretion of the court. See *Gyromat Corp. v. Champion Spark Plug Co.*, 735 F.2d 549, 557 (Fed. Cir. 1984); *Bio-Rad*, 807 F.2d at 969. Nevertheless, the court's decisions regarding the interest rate and compounding must be related to Congress' intent in § 284 to make the plaintiff whole. See *Bio-Rad*, 807 F.2d at 969 ("In exercising that discretion, however, the district court must be guided by the purpose of prejudgment interest, which is to ensure that the patent owner is placed in as good a position as he would have been had the infringer entered into a reasonable royalty agreement.") (internal quotation marks omitted); cf. *Lam, Inc. v. Johns-Manville Corp.*, 718 F.2d 1056, 1066 (Fed. Cir. 1983) ("The district court may 'fix' the interest and select an award above the statutory rate, or select an award at the prime rate. Once the claimant has affirmatively demonstrated that a higher rate should be used the district court may fix the interest at that higher rate." (footnote and citations omitted)). The court will therefore take into consideration [\*61] evidence regarding what measures PALP was forced to take because of the loss, see *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 939 F.2d 1540, 1545 (Fed. Cir. 1991) (finding no abuse of discretion in choosing prime rate compounded daily where plaintiff was forced to take out loans above prime rate during litigation), and what it might have done with the royalty money or profits from the additional sales, see *Underwater Devices Inc. v. Morrison-Knudsen Co.*, 717 F.2d 1380, 1389 (Fed. Cir. 1983) ("Prejudgment interest is awarded ... not only for the value of the actual damage suffered but also for the loss of any possible use of the money[.]"), but it will not consider the merits of GSE's case, see *Bio-Rad*, 807 F.2d at 969 ("The merits of the infringer's challenges to the

patent are immaterial in determining the amount of prejudgment interest.").

## B

PALP asks the court to award prejudgment interest n25 at the Aaa long-term corporate bond rate, compounded annually, using the mid-year convention, which assumes that losses for each year were incurred evenly throughout the year. It urges that the Aaa rate is reasonable given that it compensates [\*62] PALP for the opportunity costs forgone when it was unable to invest profits and royalty payments to which it was entitled. Alternatively, it would compensate PALP for interest it should have received on an involuntary loan of profits and royalty payments to Serrot during the period of infringement. The Aaa rate, higher than the short-term T-bill rate, but less than the prime rate, would compensate for the risk associated with possible default on the loan. PALP argues that only in situations where the patent holder prejudiced the defendant, e.g., where there was undue delay in bringing suit, would the lower T-Bill rate apply. It contends that annual compounding is reasonable when compared with daily or monthly compounding. The computations used assume that PALP invested in long-term bonds such that there was no need to be concerned with reinvesting the principal and earnings at a different interest rate each year. Based upon the calculations of Dr. Ugone, PALP requests \$ 2,522,033.00 in interest from June 9, 1998 to January 21, 2003, and \$ 2,909.36 in interest per diem after January 21, 2003 until the date of payment.

n25 PALP presents additional argument regarding prejudgment interest in response to GSE's motion to alter or amend the judgment.

## [\*63]

GSE argues both its motion to alter or amend the judgment and in response to PALP's motion to set prejudgment interest that the Aaa long-term corporate bond rate and annually compounded interest are inappropriate. GSE posits that PALP has neither provided evidence that it was forced to take out loans to keep afloat nor proof regarding its investment practices. GSE argues that the short term T-bill rate is more appropriate because it is often used in patent cases and is a more likely form of investment because 52-week T-bills do not

tie up a corporation's cash for any significant amount of time and there is little fluctuation in bond price. GSE also contends that PALP has provided no basis for compounding interest and that there is no requirement that compound interest be awarded. GSE therefore asks that the court exercise its discretion to award simple interest. Finally, GSE states that awarding interest for the entire time from the date of infringement to the date of the judgment is inappropriate because PALP waited two years to notify Serrot of its infringement and then delayed another seven months before filing suit.

PALP replies that no affirmative proof is required regarding [\*64] investment practices or whether money was borrowed to award a rate above the short term T-bill rate. It maintains that the T-bill rate is inappropriate because it gives a significant windfall to GSE, who essentially borrowed royalty payments and profits from PALP and will only be forced to repay the loan at a significantly reduced rate. PALP contends that the Aaa long-term corporate bond rate better anticipates the risks it would have faced in investing the additional profits or royalty payments and will more fully compensate it for its losses. A long-term rate eliminates the reinvestment risks that are associated with the possibility that bond rates will change before reinvestment, whereas compounded long-term bonds generally carry a fixed rate. PALP reasons that this stability is particularly convincing given the significant drop in short term T-bill rates during the period of infringement. Finally, PALP replies that it did not delay in notifying Serrot of infringement or in bringing suit. It avers that employees put Serrot on notice of the new patent as early as June 1998 but did not have actual notice of Serrot's infringement until January 2000, notifying Serrot of its infringement [\*65] just two months later. PALP filed suit in July 2000 and served Serrot in October, when the dispute could not be resolved. PALP argues that this does not constitute significant delay and should not influence the court's prejudgment interest determinations.

C.

The court in its discretion will award interest at the Aaa corporate long-term bond rate compounded annually, using the mid-year convention methodology beginning June 9, 1998. This award will provide PALP with a modest, low-risk return on money it was deprived during the period of infringement. PALP has not requested the more ambitious prime rate compounded annually, which

it could reasonably have requested given that courts have considered lost profits and the absence of royalty payments comparable to an involuntary loan by a plaintiff to defendant, requiring repayment at or above the prime rate.

The court is not concerned that PALP was exposed to exceptional hardship as a result of the infringement or that it was forced to take out short-term or long-term loans to keep afloat. Rather, the money received would have been simple profits that PALP would have been free to invest or to reinvest in the company, without worrying that [\*66] cash be available at short notice. Therefore, the longer-term, low-risk corporate bonds, compounded annually are a fair approximation of the kind of return that PALP might have received. The court accepts PALP's prejudgment interest request at the Aaa long-term corporate bond rate, with annual compounding, using the mid-year convention methodology. Because the court has ordered a remittitur, it directs PALP to provide the court, at the same time it accepts the remittitur (assuming it does), a computation of the prejudgment interest owed. The court will include the correct amount of prejudgment interest in its amended judgment.

## IX

PALP seeks an award of attorney's fees. Following the verdict, the court concluded that the case is exceptional considering the jury's finding of willful infringement. In its motion to alter or amend the judgment, GSE asks the court to reconsider its initial conclusion. The court on further consideration declines to award attorney's fees in this case where there is no evidence of bad faith, frivolous litigation, or egregious conduct.

## A

Attorney's fees may be awarded in exceptional patent infringement cases. *See 35 U.S.C. § 285* [\*67] ("The court in exceptional cases may award reasonable attorney fees to the prevailing party."). "Case law explains the application of 35 U.S.C. § 285 as involving a two-step analysis of first determining whether the case is exceptional and then determining the amount of the award[.]" *Special Devices, Inc. v. OEA, Inc.*, 269 F.3d 1340, 1344 (Fed. Cir. 2001). These two steps, however, are not mutually exclusive, but related. The more exceptional the case the greater level of attorney's fees that are appropriate. *Id.* ("In other words, the

exceptionality determination highly influences the award setting.").

A finding of willful infringement by the jury will generally be sufficient to find exceptionality: "An express finding of willful infringement is a sufficient basis for classifying a case as 'exceptional,' and indeed, when a trial court denies attorney fees in spite of a finding of willful infringement, the court must explain why the case is not 'exceptional' within the meaning of the statute." *Modine Mfg. Co. v. Allen Group, Inc.*, 917 F.2d 538, 543 (Fed. Cir. 1990); accord *S.C. Johnson & Son, Inc. v. Carter-Wallace, Inc.*, 781 F.2d 198, 200 (Fed. Cir. 1986) [\*68] ("District courts have tended to award attorney fees when willful infringement has been proven, and this court has uniformly upheld such awards ... When infringement was found not willful, the district court's denial of attorney fees or increased damages has not been disturbed."). The finding of exceptionality, however, is a factual determination that is subject to clear error review on appeal, *S.C. Johnson*, 781 F.2d at 201; and it is therefore necessary for the district court "to articulate the basis for a finding of exceptional circumstances," *id.*; accord *Reactive Metals & Alloys Corp. v. ESM, Inc.*, 769 F.2d 1578, 1582 (Fed. Cir. 1985) ("In order to provide a basis for meaningful review, it is incumbent on the trial court not only to make the ultimate finding that the case is exceptional, but also to articulate the more particular factual findings from which the finding of 'exceptional circumstances' follows."). "In awarding attorney fees to a prevailing accused infringer, such exceptional circumstances include, *inter alia*, inequitable conduct during prosecution of a patent, misconduct during litigation, vexatious or unjustified litigation, [\*69] or a frivolous suit." *Bayer Aktiengesellschaft v. Duphar Int'l Research B.V.*, 738 F.2d 1237, 1242 (Fed. Cir. 1984) (footnotes omitted). There should "be a showing of conduct which is unfair, in bad faith, inequitable, or unconscionable." *Eltra Corp. v. Basic Inc.*, 599 F.2d 745, 758 (6th Cir. 1979). The prevailing party has the burden of proving by clear and convincing evidence that a case is exceptional. *McNeil-PPC, Inc. v. L. Perrigo Co.*, 337 F.3d 1362, 2003 WL 2176781, at \*8 (Fed. Cir. 2003) ("Evidence of [exceptional] conduct must be supported by clear and convincing evidence.").

Although a finding of exceptionality allows the court to award attorney's fees, "even an exceptional case does not require in all circumstances the award of attorney fees." *S.C. Johnson*, 781 F.2d at 201. After the court

makes an exceptionality determination, it retains broad discretion to award or decline to award attorney's fees and to determine the extent of an award. *See Modine*, 917 F.2d at 543. In exercising its discretion, the court should take into consideration "the closeness of the case, [\*70] the tactics of counsel, the conduct of the parties, and any other factors that may contribute to a fair allocation of the burdens of litigation as between winner and loser." *S.C. Johnson*, 781 F.2d at 201; accord *J.P. Stevens Co. v. Lex Tex Ltd.*, 822 F.2d 1047, 1051 (Fed. Cir. 1987).

## B

The court recognizes that a finding of exceptionality has some correlation with a jury's willfulness determination, an award of attorney's fees is not automatic. The facts of this case, however, do not support a factual finding of exceptionality under the clear and convincing evidence standard. The court's factual findings regarding increased damages, *see supra* § VII(B), n26 demonstrate no frivolous litigation, no inappropriate litigation tactics, no egregious conduct during infringement, and the fact that the trial evidence presented a close case on several factual issues, particularly on the question of willful infringement. Serrot and GSE did not engage in unfair, unconscionable, or inequitable conduct. Without other culpable conduct, the close willfulness determination does not support by clear and convincing evidence a finding that this is an exceptional case. [\*71] On further consideration, the court finds that this is not an exceptional case and declines to award attorney's fees.

n26 The court incorporates these findings as factual predicates alone, stripped of the enhanced damages analysis. In other words, the court has not mistakenly concluded that its findings concerning enhanced damages dictate its conclusion regarding whether the case is an exceptional one that justifies an award of attorney's fees. Instead, it has analyzed the facts under the separate exceptionality standards, not under the enhanced damages standards.

## X

In a May 28, 2003 joint motion regarding

2003 U.S. Dist. LEXIS 14130, \*71

arbitrability the parties ask the court to determine whether GSE is precluded by this litigation from pursuing arbitration under the TLA between PALP and GSE.

GSE has initiated under the TLA an arbitration proceeding against PALP that concerns the '047 and '112 *patents*. GSE seeks relief regarding the validity of the patents. The court assumes that GSE is requesting a determination regarding patent validity [\*72] from the Arbitration Tribunal in order to resolve whether it owes royalty payments to PALP. The Arbitration Tribunal has concluded that issues of arbitrability are for the court to decide n27 and has directed the parties to obtain from this court rulings concerning whether (1) validity and enforceability are issues subject to arbitration under the license agreement between PALP and GSE, (2) the court's December 4, 2002 order precludes arbitrating the validity of the '047 and '112 *patents*, and (3) any other substantive issues of arbitrability bar the arbitration.

n27 See *Howsam v. Dean Witter Reynolds, Inc.*, 537 U.S. 79, 123 S. Ct. 588, 591-92, 154 L. Ed. 2d 491 (2002).

Although the court recognizes that the parties are acting in response to the Arbitration Tribunal's directive, the court declines to decide these questions in the context of this lawsuit. This case has been tried to a jury and, if PALP accepts a remittitur, will shortly be the subject of a final judgment. The suit pertains to GSE's [\*73] liability for Serrot's patent infringement, not liability for its own infringement or its rights under the license agreement with PALP. n28 Once the court enters its final judgment, there will be nothing left to resolve. In particular, to bring this case to a conclusion the court need not decide the preclusive effect of its December 4, 2002 court order or of the jury's determination of the validity of the '047 and '112 *patents* on any other lawsuit or arbitration proceeding. In response to the Arbitration Tribunal directive, the parties are essentially seeking an ancillary, if not advisory, ruling that should be sought in a court of competent jurisdiction by way of, a declaratory judgment action. n29 Therefore, the court declines to rule on the arbitrability of the dispute concerning the validity of the '047 and '112 *patents* arising under the license agreement between GSE and PALP.

n28 As the court wrote in its

December 4, 2002 order:

For similar reasons, the court denies GSE's motion to stay action pending arbitration and to compel arbitration. The non-exclusive license agreement requires the parties to submit to binding arbitration "any disagreement arising out of this Agreement or from the breach of it[.]" P. App. 84. PALP's suit against GSE is neither a disagreement arising out of the non-exclusive license agreement nor a disagreement arising from the breach of it. PALP sues GSE as Serrot's successor based on Serrot's conduct, not GSE's. GSE has simply been substituted as a party under *Rule 25(c)* in place of Serrot.

Dec. 4, 2002 Order at 2.

[\*74]

n29 Although this court would be a court of competent jurisdiction, others may also have jurisdiction to decide such a dispute. And while a declaratory judgment action may offer the best method of resolving the issues presented, other types of suits may also enable the parties to resolve the questions the Arbitration Tribunal has raised.

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The parties' motions are granted in part and denied in part. The court conditions its denial of a new trial on PALP's acceptance of a remittitur of \$ 266,502.00 in reasonable royalties. If PALP does not accept this remittitur within 20 days of the date this memorandum

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opinion and order is filed, the court will grant a new trial. If it does accept the remittitur, the court will file an amended judgment consistent with this opinion. The court also directs PALP to provide the court, at the same time it accepts the remittitur (assuming it does), a lump sum computation of the prejudgment interest owed through the date the calculation is submitted to the court and a per diem rate for each day thereafter so that the court can set the proper amount in the amended [\*75]

judgment.

**SO ORDERED.**

August 13, 2003.

SIDNEY A. FITZWATER

UNITED STATES DISTRICT JUDGE